The Evolving Cataloging Department

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Abstract

The shrinking of traditional cataloging departments is not news to library technical services staff. Nor is it news that digital projects that require standardized metadata are being created and supported by the same libraries that employ traditional catalogers. What may be less apparent is the ease with which a traditional cataloging unit can be transformed to incorporate metadata creation in the regular workflow of these units. IUPUI University Library's Bibliographic and Metadata Services Team (BAMS) has made this transition and provides one example of how libraries can capitalize on the wealth of skilled employees already in place. This article discusses the full range of ideologies already in place and tactics used, including hiring a metadata cataloger, collaborating with digital initiatives groups in and outside the library, outsourcing some of the traditional cataloging, and training copy catalogers to create metadata to increase the viability and currency of the skills of a traditional cataloging unit.

Introduction

In its broadest context metadata is often defined as data about data, supporting the notion by many professionals that the application of AACR2 and utility of MARC by catalogers is metadata creation. However, in current parlance, metadata usually refers to the digital environment and such schemas as Dublin Core and Encoded Archival Description. While these schemas may not be MARC, the thought processes and some of the standardizing tools employed to create metadata, such as controlled vocabularies,

are certainly similar if not the same. Understanding this relationship between cataloging and metadata, IUPUI University Library's Cataloging Team made the move to become the Bibliographic and Metadata Services (BAMS) Team, comprised of a skillful staff that could handle both traditional and metadata cataloging projects.

This article will describe the cataloging team before its transformation, factors that prompted the change, and strategies that the team leader took to effect the reorganization. Those strategies included hiring a metadata librarian, collaborating with other units in the library to hire a pool of graduate students from the School of Library and Information Science at IUPUI, developing a program for outsourcing some of the traditional cataloging, and training experienced copy catalogers to create metadata for digital projects. In addition, this article will describe the roles of the metadata librarian, which include planning and executing the bibliographic description of digital collections, collaborating with internal and external colleagues to develop projects, and serving as key administrator of metadata for the Library's institutional digital repository.

Brief Review of the Literature

Literature regarding metadata creation and its relationship to cataloging generally runs along four avenues: 1) is metadata creation cataloging?; 2) catalogers as metadata creators; 3) education of catalogers; and 4) details of a digital project which include metadata creation done by catalogers. A tangential but equally important note is that discussions of decreasing cataloging departments often coincide with the concept of catalogers as metadata creators, suggesting the notion (valid or not) that metadata is being connected with job security for catalogers. In "Supply and Demand for Catalogers: Present and Future," Joan M. Leysen and Jeanne M. K. Boydston argue that participation

in digital projects at least "allows the opportunity for collaboration with individuals outside technical services which could offer catalogers of the future a more visible presence in the university [or greater] community." [1]

In 2003 Kathleen Wells of the University of Southern Mississippi Libraries conducted a survey of 112 publicly supported universities in the southeastern United States to examine how technical service departments in academic libraries have been affected by reduced budgets. Her results indicate that cataloging departments have been hardest hit. Overall departmental reorganization and shifting of activities from professional to paraprofessional staff are typical outcomes of this reduced budget. [2] IUPUI University Library is no exception to this trend, and the impending shrinkage of cataloging staff was one of the impetuses spurring a move towards making the word "cataloger" synonymous with "metadata creation" in University Library. Indeed, the literature suggests that this movement toward synonymity is already underway. A 2003 survey conducted by the Association for Library Collections and Technical Services (ALCTS) Continuing Education Task Force, sought to identify areas of need for catalogers' continuing education curriculum. The survey noted, "of the 63.3% of respondents currently undertaking or planning any digital projects, 79% had cataloging librarians or staff involved in these digital projects." [3]

The notion of repurposing cataloging skills for metadata creation has already been suggested in conference presentations by many in the field. Carol Hixson spoke at the Annual Meeting of the American Association of Law Libraries in St. Louis in July of 2005 regarding the University of Oregon's technical service department reorganization. At Oregon, a traditional cataloging department of twenty people was transformed into a

Metadata and Digital Services Team of thirty. [4] Additionally, Char Simser of Kansas State University has conducted a workshop illustrating how that library's catalogers were intimately involved in the initial planning and ultimate execution of K-State Digital Library. [5] IUPUI's story will fill a void in published literature with its detailed description of how technically and administratively, not just theoretically, to incorporate metadata into cataloging departments.

Background

IUPUI University Library's Cataloging Team has evolved from a traditional one consisting of several professional and paraprofessional staff primarily occupied with cataloging print and some audio/visual materials, to a streamlined staff of 2.5 FTE professionals and 3.5 FTE paraprofessionals creating metadata for digital items in the *Digital Collections of IUPUI University Library*, as well as maintaining traditional cataloging activities. While the methods presented here can certainly be applied in a variety of library types and sizes, it is important to note some basic demographics and characteristics of IUPUI University Library as a means of framing the accomplishments. In 2002, the Cataloging Team consisted of 1.25 FTE librarians (tenure-track faculty), 1 FTE non-librarian who had a masters in library science, 4 FTE copy catalogers, and 1 PTE copy cataloger. The Library has been a team-based organizational since 1996, resulting in a more flattened administrative structure encouraging cross-team collaboration. Additionally, innovation and experimentation have been hallmarks of University Library's culture. The administration is comfortable taking risks and supports trying new ideas and innovation. New technologies are always on the front burner. The staff is accustomed to forward-looking administration and librarians, and the organization

is highly adaptable. Certainly these attributes paved the way for the Cataloging Team more easily to transform itself, but as this article will detail, drastic reorganization is not necessary for successfully rooting metadata creation in a cataloging department.

Over the years, the number of staff members in University Library's cataloging team, both librarians and paraprofessionals, has been significantly reduced. The organization prided itself on the fact that there was virtually no cataloging backlog. With reduced staff, this tradition placed considerable pressure on the four copy catalogers to keep up with current cataloging volume. Meanwhile, only the team leader was responsible for original cataloging and helping with catalogers' questions, in addition to administrative duties such as supervision and representing the Cataloging Team at the Leadership Team level. The team leader saw a serious need for more staff, and also knew that the budget for staff was extremely tight. In addition to the need for catalogers to keep up with the traditional cataloging of physical items, the team leader saw an opportunity for the Cataloging Team to play a key role in the digital library projects that were beginning to develop. Metadata would be needed, and it was believed that experienced catalogers, as opposed to students or part-time staff with technical expertise but no experience in bibliographic description and classification, were the people best suited to create the metadata. In view of these factors, the team leader developed and began pursuing strategies to increase staff and to position the team to step into the role of metadata creators. Those strategies were: to seek and secure a new faculty librarian position; begin using graduate library science students to complete traditional cataloging tasks allowing permanent staff time to work on metadata projects; work with the

catalogers to create a team name reflecting its new tasks; and work with the Cataloging and Acquisition Teams to streamline workflow.

Strategy 1: New Professional Hire

The new librarian position was created by combining an hourly position (initially held by a staff member with an MLS) and an unfilled copy cataloger position. The librarian position was advertised with language that included metadata creation and digital projects, a tactic University Library was not alone in pursuing. In a survey conducted over 2000 and 2001 examining job postings published in *C&RL News*, *American Libraries*, and the listserv AUTOCAT, 38.41% of job postings required experience or familiarity with emerging metadata schemes and tools. [6] This strategy was successful in part because of library Dean's interest in digital projects, his understanding of the importance of good metadata, and because of an already congenial collaborative relationship between the team leaders of Cataloging and Digital Libraries. A candidate with the perfect mix of traditional cataloging and metadata skills was hired in July 2003.

A recent graduate from the IUPUI School of Library and Information Science, this candidate had taken course work that included creating metadata and had also worked as a graduate assistant in the IUPUI Ruth Lilly Special Collections and Archives, cataloging images for the IUPUI Image Collection, a collection devoted to the history of the IUPUI campus. To the Cataloging Team she brought a familiarity with the digital content management software, CONTENTdm; knowledge of applying various standardizing tools including Dublin Core, Library of Congress Subject Headings (LCSH), and Thesaurus for Graphic Material; and first-hand experience establishing a

digital collection's metadata dictionary. [7] In addition and equally important, the new librarian had an educational background and work history in traditional monograph cataloging.

Janet Swan-Hill in her article, "Analog People for Digital Dreams: Staffing and Education Considerations for Cataloging and Metadata Professionals," suggests that the decrease in cataloging professionals is inversely proportionate to the multitude of new information formats, including digital objects, requiring cataloging. As a result Swan-Hill suggests it is more important and viable for catalogers at most libraries to maintain a variety of cataloging skills rather than to begin specializing in one format or schema. [8] This concept certainly rang true for University Library.

It was essential that the new cataloging/metadata librarian be well versed in all aspects of cataloging, allowing the new hire to take over much of the original cataloging duties and to begin assimilating the traditional catalogers into the digital world of metadata creation. The ultimate goal of hiring a metadata librarian to be part of the BAMS Team was to find a person that would actively advocate for and promote the means by which catalogers could enhance the utility of the library's digital collections.

Strategy 2: Student Work

Another transformative strategy was developed in cooperation with the Digital Libraries and Special Collections Team Leaders. Using existing resources, the three teams pooled hourly wage money and hired a group of four graduate students already schooled in basic cataloging from the IUPUI School of Library and Information Science. The four were first trained in copy cataloging using the Sirsi library management system and then moved among the three teams as needed. As a result of investing some training

time, the three teams received the services of four students whose cataloging skills (including metadata creation) benefited the projects of various library groups. This strategy reinforced to the library organization and the administration the wide-ranging effectiveness and usefulness of employees with cataloging skills.

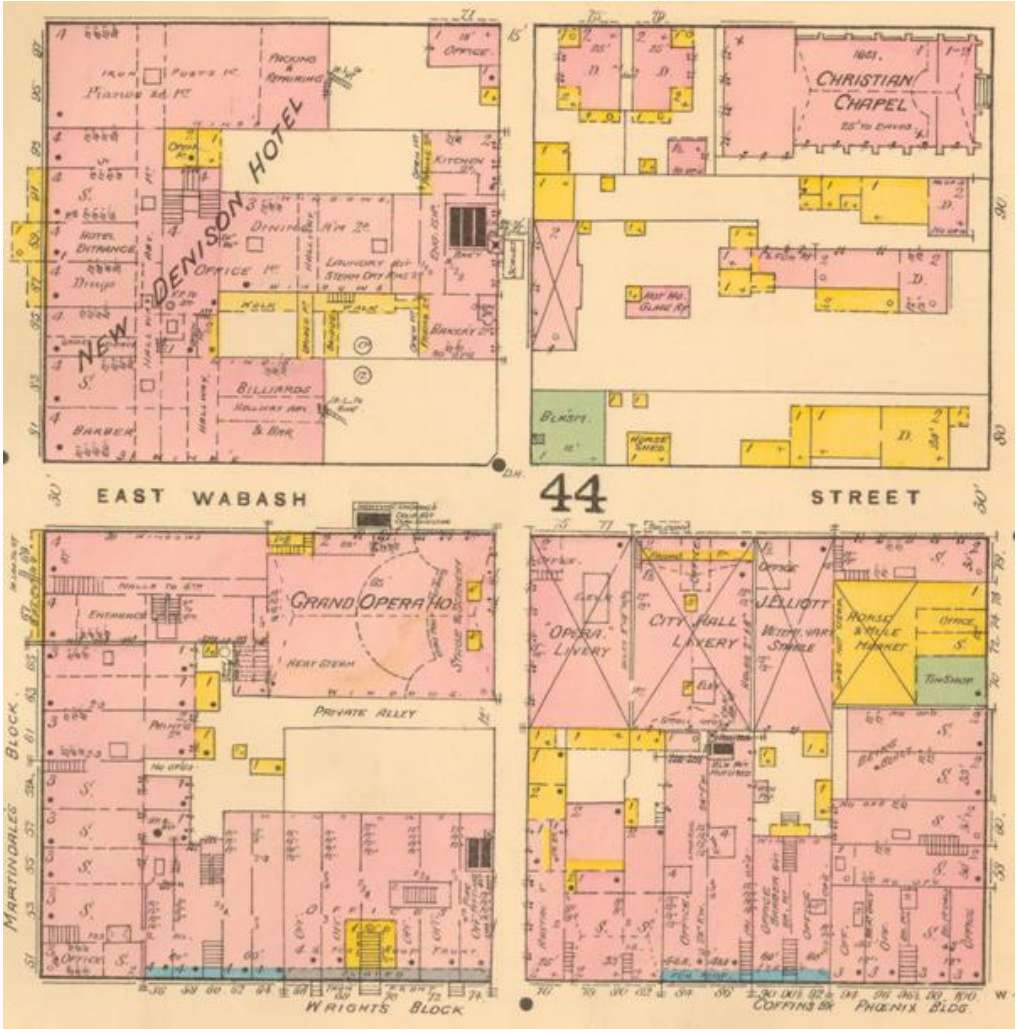
Strategy 3: What's in a Name?

In order to reflect the Cataloging Team's changing direction, as well as to promote its metadata skills, the unit's name was changed from Cataloging Team to Bibliographic and Metadata Services Team. This was a fairly easy method of demonstrating change; no opposition from library administration was encountered. Team members scanned the websites of other library cataloging departments looking for sample name changes, and using these names as a guide the group together selected Bibliographic and Metadata Services. This name change allowed all the catalogers to have a hand in transforming their work identity, and it reinforced to the rest of the library that catalogers too were keeping pace with the digital world. [9]

Strategy 4: Claiming and Creating a Metadata Project: The Indianapolis Sanborn Map Project

The first major metadata project that BAMS oversaw was the Indianapolis Sanborn Fire Insurance Map project. In 1867 the Sanborn Fire Insurance Company began making maps for the purpose of assessing a property's value based on its location, construction, and fire risk. The maps include footprints of all buildings with information on type of structure (dwelling, business, etc.), material used (hollow concrete or cement block construction; frame building covered with asbestos, etc.), number of stories, location of windows and chimneys, whether there were sprinklers, street number, and

often the name and/or type of landmark. The maps are now gold mines of information for historians, sociologists, urban planners, genealogists, historic home owners looking to refurbish, anthropologists, and anyone wanting to better understand the development of urban spaces and their human inhabitants over time.



A section of an Indianapolis Sanborn Fire Insurance Map from 1887. Visit http://indiamond6.ulib.iupui.edu/SanbornJP2/ to view the entire collection.

Two years ago IUPUI University Library received a Library Services and Technology Act (LSTA) grant to digitize the Indianapolis Sanborn Maps owned by the Indiana State Library, covering the years 1887, 1898 (updated to 1915), and 1915

(updated to 1930's). The library used the grant to purchase a large format flatbed scanner and wages for student workers to scan the maps. Serendipitously, the newly-hired metadata librarian had experience working with these maps as a historical researcher and was thrilled at the idea of creating in-depth, searchable records for these maps. She approached the Digital Initiatives coordinator with the concept of connecting addresses, landmark names, and landmark types to each of the over 900 maps. The metadata librarian knew it was a time-intensive undertaking, requiring an individual to look at each 64 x 54 cm. map in minute detail, but also believed it a worthy project with a strong appeal to a large research audience.

Prior to training the catalogers in metadata creation, the metadata librarian and the Digital Library coordinator established the metadata fields that would be connected with every map. The data dictionary included administrative data such as copyright statements and digital file size and type as well as descriptive data including the list of address ranges shown on a particular map, the landmark names (e.g. Moore Desk Factory; Oak Hill Boarding House; Indiana, Bloomington, and Western Railway) and landmark types (e.g. lodging houses; brickworks; and furniture workers). Additionally, the metadata librarian connected all appropriate metadata fields to standards. The Library of Congress Name Authority File (LCNAF) was consulted for landmark name creation. The Getty Art and Architecture Thesaurus (AAT) was selected as the controlled vocabulary associated with the landmark type field. Dates were based on International Organization for Standardization (ISO) standard 8061. Finally because the CONTENTdm software was selected as the tool for creating all of University Library's digital image collections, the entire project would be rooted in Dublin Core.

The metadata librarian also created a step-by-step cataloging guide that was posted on the BAMS Team intranet site. This guide included links to every tool required for creating metadata as well as guidance on making decisions about a landmark's name or type. Once the framework was in place the training of the catalogers commenced with group training followed by additional one-on-one sessions. The one-on-one sessions proved most useful as a result of varying learning styles. Throughout the training the metadata librarian continually reinforced the similarities between particular aspects of creating metadata and those of cataloging. For example, catalogers search the LCNAF to ensure all personal or corporate names on a MARC record are accurate. In the same way, the catalogers were now searching LCNAF to establish landmark names. If no authority record was found, one was created based on AACR2 standards. In other cases such as searching the AAT, the metadata librarian encouraged staff to apply their understanding of the Library of Congress Subject Heading's (LCSH's) use of broad and narrow terms to the similar organizational concept of AAT. Making these connections between traditional and new eased the transition for paraprofessional staff.

Another skill that is not often touted when speaking about catalogers is their ability to multi-task, that is, their ability to consult a variety of sources at any single moment to make an informed decision regarding the item being described. This skill was essential for the Indianapolis Sanborn Map Project. However, instead of the cataloger consulting various print guides or a combination of print and electronic, such as Cataloger's Desktop, they were working almost exclusively online. The maps described were online because the print versions were not easily accessible. Additionally, the

controlled vocabulary tools, the step-by-step guide, and the Excel spreadsheet containing the address ranges were also online via BAMS intranet site.

The everyday workflow of making these maps publicly accessible speaks volumes to the positive results of the collaborative nature of the Sanborn project. The Digital Library Team student employees scanned the Indiana State Library-owned maps. Catalogers uploaded the scanned map files into CONTENTdm. Then, using CONTENTdm much as they would an OCLC workform, catalogers determined appropriate information for metadata fields pertaining to map title, map number, file number, address ranges, landmark types and landmark names. The catalogers then uploaded the maps to a staging area within CONTENTdm where the metadata librarian conducted metadata quality control and added new terms to the system's built-in controlled vocabulary functionality. Finally the metadata librarian ran the collection's index making the maps available in the public interface, which was in-part designed by the Digital Libraries Team.

Along with the full time catalogers creating metadata for this project, BAMS secured two library science interns, both with a background in cataloging, to work on metadata. These two students earned graduate course credit towards their degree as well as invaluable hands-on experience. One of these students remained with BAMS post-internship as a part-time employee, funded through a grant administered by the Digital Libraries Team. This is yet another example of the financial and intellectual collaboration between BAMS and Digital Libraries Team. It was extremely important that all metadata creation for the Sanborn Map collection remain under the purview of BAMS administration, not only for the assurance of a uniform, highly accurate collection but

also as a means of cementing the connection between metadata creation and BAMS. It is important to note that none of the catalogers' traditional cataloging tasks decreased or were reassigned as result of taking on metadata creation. As the midway point of the project's grant deadline approached, it was determined that the metadata would not be complete unless other catalogers were employed. An arrangement was made for Digital Libraries, who often has more funding than BAMS, to fund part-time student catalogers with BAMS acting as the managerial head of the metadata creation.

The Sanborn Map project was completed in two phases. It took one year to catalog the 1887 and 1898 maps (440 in total) and another year to catalog the 1915 maps (484 in total). Upon beginning the second year, the group evaluated the entire uploading and metadata process and altered it slightly to account for the new digital file format JPEG2000 (the maps had originally been in MrSid format) and to speed the cataloging turnaround time. In 2005, University Library purchased a CONTENTdm extension that would allow the collections to take advantage of the new format JPEG2000 which allows zooming and panning within an image. Using this format required that large (130 MB) full resolution tiffs be uploaded into CONTENTdm at the point of cataloging, a workflow step that was avoided when using the MrSid file format. In the process of trying to upload and catalog these large files the cataloger's workstations would freeze and ultimately have to be shut down. A member of the Digital Initiatives group and the metadata cataloger devised a workflow that would include a batch load of all maps prior to cataloging using a robust workstation and faster network connection available in the digitization lab.

Another aspect of the workflow that was made infinitely more productive as a result of the catalogers' rigorous work on the first Sanborn collection was the fact that the core landmark name and landmark type vocabularies had already been established. Certainly many of the buildings that existed in 1887 and 1898 were no longer present in 1915 but a surprising number were. Populating the controlled vocabulary tool of the second map collection with the vocabulary of the first map collection presented the catalogers with a ready to use list of applicable and likely headings.

The final result of the workflow alterations was the creation of an intra-team communication mechanism through the use of a wiki, "a piece of server software that allows users to freely create and edit Web page content using any Web browser." [10] Using a wiki, BAMS members were able to simultaneously post questions and find answers to which the entire group had access, therefore lessening the number of repeated questions and the amount of time spent cataloging Sanborn maps. These workflow alterations speak again to the collaborative nature of metadata projects as well as to the new types of technological skills that traditional catalogers and/or metadata catalogers acquire as a result of the changing digital environment.

Strategy 5: Metadata Librarian as Consultant

Indiana Historic Landmarks Foundation and the Indiana State Library

The Sanborn Map Project included collaboration between two teams within the same library. The fifth strategy proves that catalogers are equally at home in external collaborative partnerships. The Indiana Historic Architecture Slide Collection is the result of a collectively sought LSTA grant. In this collaboration the IUPUI Digital Library Team provided the digitization, and Historic Landmarks Foundation provided the

content (photographic slides) to be digitized, as well as metadata creation. In this instance, the IUPUI metadata librarian acted as initial and ongoing metadata consultant. While the individual from the Historic Landmarks Foundation entering the metadata was an expert in the subject matter of the slides, she was not well-versed in traditional cataloging or Dublin Core metadata creation. The IUPUI metadata librarian suggested metadata fields that would enhance the collection and various other standardizing techniques (architecture related controlled vocabularies), but the ultimate decision on what the metadata would look like was in the hands of the Historic Landmarks Foundation.

Another consultancy undertaken by the metadata librarian was that of trainer for a group of Indiana State Library staff members. Similar to the state of Ohio's OHIOLink, the Indiana State Library is currently embarking on the ambitious project of creating a state-wide digital collection using collections from across the state. In line with University Library's philosophy, the leaders of this state-wide initiative have similar notions regarding a cataloger's ability and suitability for creating metadata. Yet, catalogers at the Indiana State Library had not yet had the opportunity to be introduced to the concepts of metadata, let alone to the act of creating metadata (apart from MARC). In September 2006, the University Library metadata librarian conducted a well-received hands-on introductory session to Dublin Core at the Indiana State Library. One workshop attendee noted, "The success of [this] training was evident to me when several participants stated after [the] session that they now find metadata to be interesting rather than intimidating."[11] These consultation activities not only open avenues for future

collaborations but also reinforce to all library communities and administration the connection between cataloging and metadata.

IDeA

IDeA is IUPUI's Institutional Digital Repository, a digital archive that stores, preserves, and allows public access to digital scholarship created by or related to IUPUI faculty, staff, and students. IDeA was conceived in 2001 by a group of librarians concerned with open access to scholarly communication, particularly in the shadow of rising journal subscription costs. While this group convened prior to the metadata librarian's hiring, it was immediately agreed that her involvement would be required for a successful institutional repository. IDeA is built on the open access software DSpace created by MIT and Hewlett Packard and like CONTENTdm, it operates using Dublin Core.

One aspect that makes IDeA unique from other digital repositories is in the manner in which it is populated. Rather than the library or one particular group depositing items, the author of the digital scholarship deposits his or her own work, i.e. creates the metadata for his/her own work via a digital form upon submission. The library's responsibility is to ensure that the qualifying submissions exist into perpetuity and to assist authors/groups of authors (such as research centers) in the establishment of their own scholarly communities within the repository. Because IDeA was new, the metadata librarian took a variety of roles, some unrelated to her position as metadata librarian, in getting the repository off the ground, including: showcasing the tool to faculty, creating informational pamphlets, speaking at conferences regarding DSpace and institutional repositories in general, setting up digital space within IDeA for campus

groups to begin depositing material, and acting as the metadata consultant for the project as a whole. One traditional cataloging concept that became an essential component of this campaign was imparting the value of standardization. Primarily, this entailed educating self-submitting authors that their records should adhere to data entry standards. Such standards include the Union List of Artist Names, a controlled vocabulary used by the art community or a broadly used date standard such as ISO 8061.

Electronic Theses and Dissertations (ETDs)

In June 2004, the metadata librarian attended the 7th International Symposium on Electronic Theses and Dissertations (ETDs) with the goal of developing a plan for ETD submission at IUPUI via IDeA. The impetus behind this goal was two-fold: to generate a semi-automatic method of creating MARC records for theses and dissertations and to promote public access to IUPUI student research. All IUPUI-generated theses and dissertations require original MARC cataloging which are often time-consuming due to the highly technical subject matter. The metadata librarian believed that a metadata crosswalk between Dublin Core and MARC could facilitate this subject analysis as the student authors' keywords could be used as the basis for subject analysis.

Each thesis record in IDeA is reviewed by the metadata librarian who uses the author submitted keywords to establish LCSH and who also checks the included personal names against LCNAF. Therefore the ETD records in IDeA already contain the majority of the information required for a full-level MARC record. The goal was to use a Dublin Core to MARC crosswalk program to generate a base record to be included in OCLC WorldCat and IUPUI's local catalog, IUCAT. While this crosswalk method has been preliminarily tested using an open access conversion program created by Brian Cassidy

and available at Comprehensive Perl Archive Network, http://search.cpan.org/~bricas/MARC-Crosswalk-DublinCore-0.02/ it has yet to be fully employed, awaiting a significant batch of ETD's to be submitted to IDeA before commencing full testing. Additionally, to aid the conversion from Dublin Core to MARC and to make the submission process more fluid for students, the metadata librarian worked with the IDeA operations specialist to customize the submission pages to include information required in MARC thesis records. Information such as degree level (M. A., M. S., Ph. D.) and degree grantor (Indiana University or Purdue University) was put in a pull down menu format allowing students to select from a list of values rather than having to create the value on their own. This also increased the level of standardization across the ETD collection.

The degree level and degree grantor fields mentioned above are linked to an ETD specific metadata schema referred to as the Networked Digital Library of Theses and Dissertations ETD Metadata Standard (NDLTD ETD-MS) which is an extension of Dublin Core. This thesis-specific schema is not fully supported by DSpace and therefore IDeA, though IDeA does allow site administers to add non-Dublin Core fields to the metadata registry. With the belief that DSpace would eventually fully support NDLTD ETD-MS the metadata librarian added these specific fields to the metadata registry. Crosswalks between this metadata schema and MARC [12] exist, though a programmatic version has yet to be tested at IUPUI. For the time being IUPUI will move forward with automated conversion of Dublin Core to MARC as opposed to NDLTD ETD-MS to MARC.

Just as with other aspects of IDeA, the metadata librarian played a major part in the ETD collection's administration, apart from her metadata responsibilities. Theses and dissertations are traditionally managed by a student's department, the university's graduate office, and the library. IUPUI is no exception, and making digital submission of theses and dissertations a reality was highly dependent on the Graduate Office's support and active participation. Over the course of 2004 and 2005 the above parties met and established a workflow that incorporated the new electronic submission procedure while ensuring all traditional administrative tasks involved in thesis verification remained. The ETD collection within IDeA is still in its pilot phase, but the metadata librarian's involvement has been an essential component of its success thus far. [13]

Conclusion

Cataloging departments, faced with diminished staff, have developed creative strategies to cope with the challenges of providing access and bibliographic control to increasingly diverse library collections. Building on the knowledge and well-honed skills of experienced catalogers, it is possible to absorb new formats, such as digital objects and open access material, into the workflow of cataloging. By developing strong collaborative relationships within the library, the university, and other constituents, the "added value" that catalogers have long provided library collections through description, classification and controlled vocabulary can be extended to digital collections. New electronic formats have the potential of opening opportunities to catalogers for using their knowledge and experience in new ways, perhaps making their work more visible. As Leysen and Boydtson remind us, "The work performed by catalogers is largely invisible to the public; therefore, it is more susceptible to budget cuts and often can result in vacant

positions or reallocations to public services areas of the library." [14] Linking cataloging units with metadata creation, and placing cataloging professionals in the center of collaborative digital projects requiring metadata, can help shed light on the value of catalogers.

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7. An example of various data dictionaries created for the digital collections of the University of Washington can be found at:
http://www.lib.washington.edu/msd/mig/datadicts/default.html
(accessed Oct. 1, 2006).

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9. In hindsight a briefer name may have been more prudent. University Library employees understand what BAMS means but when presenting at conferences

"Bibliographic and Metadata Services" becomes somewhat unwieldy and many of the catalogers find themselves reverting to "Cataloging Team" for sheer ease of speaking.

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